

Remarks

I. Status of the Application and Claims

As originally filed, the present application had a total of 17 claims. These were cancelled in a Preliminary Amendment and new claims 18-38 were added. In the present response, claims 19, 20, 26-29 and 38 have been cancelled and new claims 39-42 have been added. Thus, the claims now pending are 18, 21-25, 30-37 and 39-42.

II. The Amendments

Claim 18 was amended by incorporating the elements of claims 19 and 20. In addition, the solid support used for growing cells was specified as being a tissue culture flask, tissue culture dish, a multiwell plate, a bead or a membrane. Support for this amendment may be found in claim 24 and on page 6 of the application, line 34-page 7, line 2.

New claim 39 is original claim 18 with the elements of claim 20 added but without the addition of the elements of claim 19. Like amended claim 18, claim 39 requires that the solid support be a tissue culture flask, tissue culture dish, a multiwell plate, a bead or a membrane. New claims 40-42 correspond to claims 21-23.

None of the amendments made herein add new matter to the application and their entry is therefore respectfully requested.

The Rejections

I. Rejection of Claims Under 35 USC § 102

On pages 2-5 of the Office Action, the Examiner makes several rejections under 35 USC § 102. These are as follows:

- a) On pages 2-3, claims 18, 19, 24-27 and 36-38 are rejected as being anticipated by Legros, *et al.* (EP 152730);
- b) On page 3, claims 18, 25, 36 and 37 are rejected based upon Stephanopoulos, *et al.* (US 5,262,320);
- c) On pages 3-4, claims 18, 29, 25-27, 36 and 37 are rejected based upon Patton, *et al.* (US 3,338,792); and

- d) On page 4, claims 18, 19, 24-27 and 36-38 are rejected based upon Besnainon, *et al.* (US 5,064,764).

None of the rejections noted above include claim 20. Since the elements of this claim have now been incorporated into claim 18 and into all of the new claims, Applicants respectfully submit that all of the rejections under 35 USC § 102 have been overcome.

II. Rejection of Claims Under 35 USC § 103

On pages 5-7 of the Office Action, claims 20-23 and 28-35 are rejected as being obvious in light of Besnainon *et al.* The Examiner argues that all of the elements in Applicants' claims are either expressly disclosed in, or obvious from, this reference.

Applicants respectfully traverse this rejection for the claims as amended herein.

The Besnainon reference discloses a culture system that has a vessel for the preculture of cells and a bioreactor. It appears that the Examiner considers the bioreactor to be the same as Applicants' culture vessel for eukaryotic cells. However, Applicants' amended claims all require a tissue culture flask, tissue culture dish, a multiwell plate, a bead or a membrane. In contrast, the bioreactor described in the reference is a multi-chambered system of tubes that are sealed with semipermeable membranes and which are symmetrically arranged around a longitudinal axis of symmetry ((15), in figure 1 of the reference) so as to permit rotation. The apparatus does not resemble any of the solid supports required by Applicants' claims. Moreover, it is not clear how the main features that appear to distinguish the bioreactor could be beneficially used in Applicants' system. Tissue culture flasks, multiwell plates, beads and membranes are not usually rotated during culturing or have compartments of the type disclosed for the bioreactor. It is also not clear what motive would exist for attempting to substitute Applicants' culture vessels for the reference's bioreactors. Thus, Applicants submit that the apparatus disclosed in the reference does not render the one claimed obvious.

In the rejection of claims under §102 based upon Besnainon, the Examiner suggests that the bioreactor described by the reference constitutes a culture flask. However, Applicants submit that a culture "flask" is understood in the art to be a closed container with a single narrow

opening and a wider, essentially rectangular body. This is clearly shown in Figures 1 and 2 in the application. The bioreactor shown in the Besnainon reference is an essentially tube-like structure whose openings do not narrow into a neck and which has a body that does not appear to be any wider than the opening. The reference does not refer to the bioreactor as a flask and Applicants are not aware of any device in the art that is structurally similar to the bioreactor that is called a flask. In light of these considerations, Applicants respectfully submit that the device described in the reference does not constitute a "tissue culture flask" as this term is used in the art.

III. Double Patenting Rejection

On pages 7 and 8 of the Office Action, the Examiner rejects all pending claims on grounds of obviousness type double patenting based upon US 6,696,287.

In response, Applicants are submitting herewith a terminal disclaimer. It is respectfully submitted that this should be sufficient to overcome this rejection.

Conclusion

In light of the amendments and discussion above, Applicants respectfully submit that all of the Examiner's rejections have been overcome. It is therefore requested that these rejections be withdrawn and that the claims presently pending in the application be allowed. If, in the opinion of the Examiner, a phone call may help to expedite the prosecution of this application, the Examiner is invited to call Applicants' undersigned attorney.

Respectfully submitted,

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